Netflex
Software Development Plan (Small Project)
Version 1.1

Revision History

Date	Version	Description	Author
23/Oct/23	1.0	Initial Release	Nguyễn Tấn Lộc
29/Oct/23	1.1	Clarify the Project Plan: - Explain the project plan to key stakeholders and discuss its key components. - Define roles and responsibilities. - Develop a scope statement. - Develop the project baselines. - Create baseline management plans. → Write more details for each phase of the project.	Nguyễn Tấn Lộc

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Software Development Plan (Small Project)

1. Introduction

This is the Software Development Plan for a small project named Netflex, a movie streaming web application. This document aims to provide information on the overview of the project, the project organization and the project's management process.

2. Project Overview

2.1 Project Purpose, Scope, and Objectives

The objective of this project is to develop a web application designed to provide a diverse range of on-demand streaming through a user-friendly platform, featuring subscription plans that cater to various preferences, from Free to Premium. Users will have effortless access to and enjoyment of movies based on their selected subscription plan.

2.2 Assumptions and Constraints

- Project's anticipated deadline is set for early December 2023
- This is a zero-budget project
- The project contains 5 people, any group member change is not allowed
- The project is set to be finished within 5 sprints

2.3 Project Deliverables

The project will yield the following deliverables:

1. Use Cases Specification (expected date of delivery: 12/Nov/23)
2. Software Architecture Document (expected date of delivery: 12/Nov/23)
3. User Interface Prototype (expected date of delivery: 12/Nov/23)
4. Database Design (expected date of delivery: 12/Nov/23)
5. Test Cases (expected date of delivery: 10/Dec/23)
6. Test Summary (expected date of delivery: 10/Dec/23)
7. Project Presentation (expected date of delivery: 24/Dec/23)

3.   Project Organization

3.1   Organizational Structure
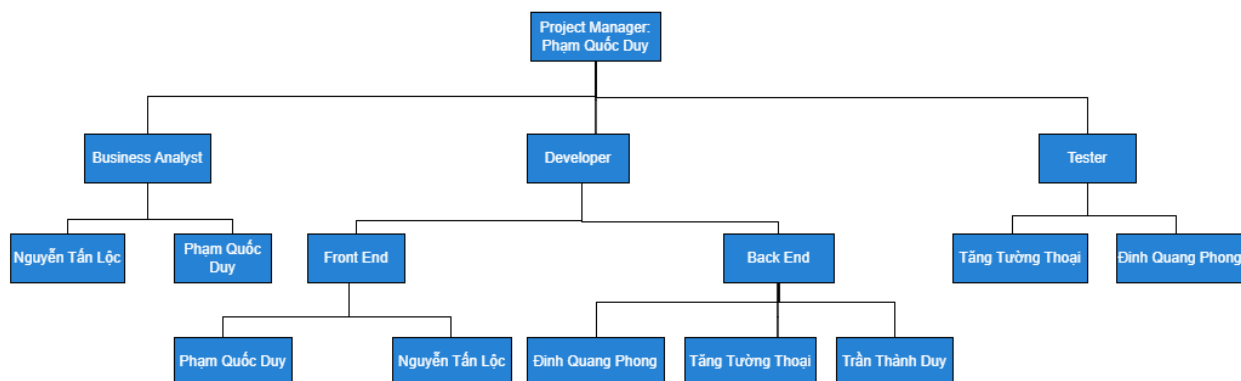
3.2   Roles and Responsibilities

Person	Role
Phạm Quốc Duy, Project manager, Developer	Project management, planning, risk management. Program and develop web interface construction, optimize interface performance, ensure cross-platform compatibility for the front end.
Trần Thành Duy, Developer, Business Analyst	Analyzing requirements, identifying appropriate solutions and contingency plans. Handling data, managing user access and permissions, and backend APIs and communication.
Nguyễn Tấn Lộc, Developer, Business Analyst	Requirements analysis, identifying appropriate solutions and backup solutions.Design user interface and user experience, program and develop web interface construction, user interaction.
Tăng Tường Thoại, Developer, Tester	APIs and communication, security, server resource management of the backend. Quality control and testing, identifying errors and issues, writing tests for each phase in parallel with the core code.
Đinh Quang Phong, Tester, Developer	Security testing, using software for automated testing, writing parallel tests alongside the main code. Testing security, data handling, user management, and access control in the backend.

4.   Management Process

4.1   Project Estimates

4.2   Project Plan

4.2.1   Phase and Iteration Plan

Phase name	Start date	End date	Overall objective
Inception	15/Oct/23	29/Oct/23	● Project scope, cost estimate and risk plan for Netflex ● Workspace and communication tools for group member ● Programming language, frameworks and hosting service for the movie website
Elaboration	29/Oct/23	12/Nov/23	● Website layout structure ● General workflow, API routes for the system ● Database relational model for film,user and admin
Construction	12/Nov/23	24/Dec/23	● Fully functional movie streaming website that satisfies all requirements ● Some prepared movies on database ● Friendly user interface on Netflex's site

Sprint	Start date	End date	Objective
Sprint 1	15/Oct/23	29/Oct/23	Planning phase
Sprint 2	29/Oct/23	12/Nov/23	Designing phase
Sprint 3	12/Nov/23	26/Nov/23	Develop phase
Sprint 4	26/Nov/23	10/Dec/23	Testing phase
Sprint 5	10/Dec/23	24/Dec/23	Delivering phase
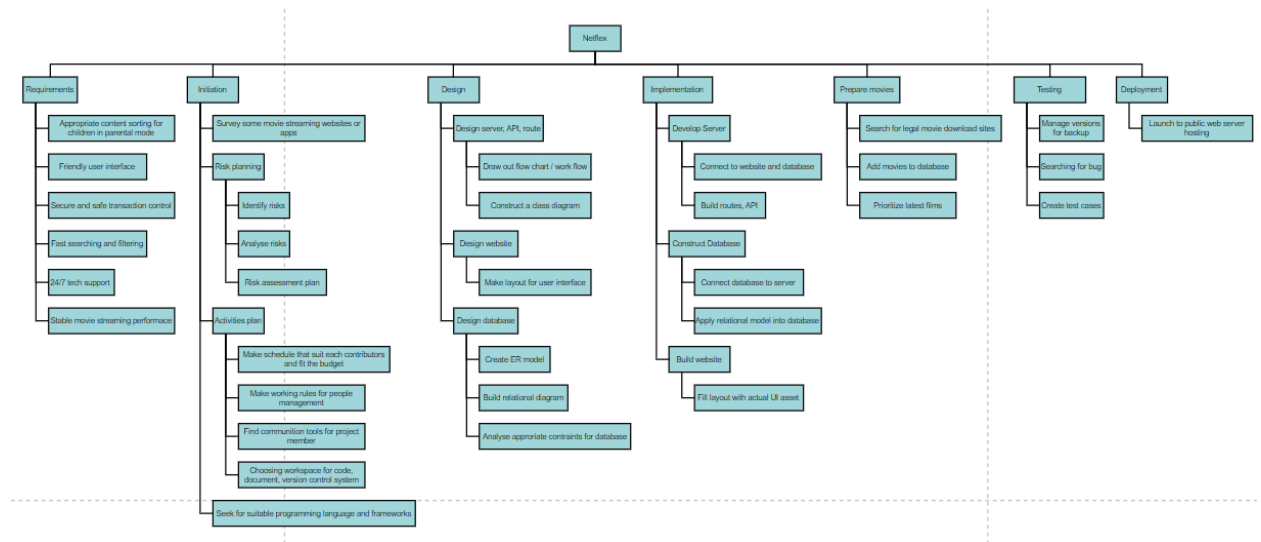
[Link for more detailed insights](#)

4.2.2 Releases

	SOFTWARE'S VERSION RELEASE PLAN	TARGET DATE
1	Prototype (In Figma Design)	09/11/2023
2	**Demo** (First version). This version brings the basics of all features that are all functional, and can be viewed only. For instances, **User account functionality:** 1. Create an account. 2. Forgot password functionality. **Movie categorization:** 1. Given 2 types of movies for categorization. **Movie Searching:** 1. Basic searching for movies name (given a string and return movie's names, which the prefix is matched with the input string, case sensitive isn't accounted for). **Data:** 1. Static, pre-configured data is necessary. **Movie watching:** 1. Should have basic facilities for this feature (include API, basic UI view).	27/11/2023
3	**Beta** (Version **1.0** with the same feature of demo enhanced with dynamics data and first version of movie watching) This version allows users to fully authenticate using various types of logging. For instances, **User account functionality:** 1. Create account 2. Captcha Verification 3. Forgot password functionality 4. Create an account and log in with third party services (Google, facebook, ...). For current scope, only third party will be chosen for implementation, which is google **Movie categorization:** 1. Able to search with a few movie categories (horror, romantic, love, cartoon, drama, scientific,...etc). The result shall be the movie metadata represented by cards in tabular format. **Movie Searching:** 1. The application shall be able to give the result of searching movies by their names (searching required ignore cases, return result if the given string is the movie's name prefix) 2. Suggest, complete the given string based on system movie names that match with the given string. **Data:** 1. Shall be able to retrieve from database and API 2. Show to user basic information including user's information, movie information, trendings,...etc **Movie watching:** 1. Shall be able to present to the user the basics of the video (resolution requirement is not considered).	04/12/2023

4	**Beta** (Version **1.x.x**) This version finalizes all core functionalities of the Netflex application. For instances, **User account functionality:** 1. Fix bugs, testing and complete functionality. 2. Generate tests and apply unit testing. **Movie categorization:** 1. Fix bugs,testing and complete functionality. 2. Generate tests and apply unit testing. **Movie Searching:** 1. Fix bugs, testing and complete functionality. 2. Generate tests and apply unit testing. **Data:** 1. Fix bugs, testing and complete functionality. 2. Generate tests and apply unit testing. **Movie watching:** 1. Fix bugs, testing and complete functionality. 2. Generate tests and apply unit testing.	11/12/2023

4.2.3 Project Schedule

We are using Google Sheet for managing and scheduling work in addiction with Trello

For more details:

https://docs.google.com/spreadsheets/d/1ZhQMqEElS5CDox-cI3S94a3KAoHkEdznKar-v8bk2a0/edit?usp=sharing

4.2.3.1. Sprint 1

SPRINT	TASK	START DATE	END DATE	ASSIGN
	Software Specifications and Functionalities	16/Oct/23	21/Oct/23	Nguyễn Tấn Lộc
	Software Specifications and User-flow	16/Oct/23	21/Oct/23	Phạm Quốc Duy
	Proposing framework and libraries, functionalities	16/Oct/23	21/Oct/23	Trần Thành Duy
	Proposing framework and libraries, functionalities	16/Oct/23	21/Oct/23	Tăng Tường Thoại
	Software Specifications Finding hosting service platform & movie database API	16/Oct/23	21/Oct/23	Đinh Quang Phong
SPRINT 1	Complete project overview and intro of Project Plan	22/Oct/23	27/Oct/23	Nguyễn Tấn Lộc
	Fill the Vision Document with as much information as possible	22/Oct/23	27/Oct/23	Phạm Quốc Duy
	Wrap up framework and libraries for back end Complete section 3 and 4.3 of Project Plan	22/Oct/23	27/Oct/23	Trần Thành Duy
	Complete section 4.2 of Project Plan	22/Oct/23	27/Oct/23	Tăng Tường Thoại
	Conchuce server hosting service & movie hosting API Complete section 4.2 of Project Plan	22/Oct/23	27/Oct/23	Đinh Quang Phong

4.2.3.2. Sprint 2

SPRINT	TASK	START DATE	END DATE	ASSIGN
	Project Plan Revise	30/Oct/23	01/Nov/23	
	Vision Document Revise	30/Oct/23	01/Nov/23	
	Draw UI - Home pages composite with searching view	30/Oct/23	04/Nov/23	
	Draw UI - Watching movie pages	30/Oct/23	04/Nov/23	
	Draw UI - Login pages including forgot password	30/Oct/23	04/Nov/23	
SPRINT 2	DBMS - Design relational data model for the system	30/Oct/23	07/Nov/23	Đinh Quang Phong
	Documents - Use case model	06/Nov/23	11/Nov/23	
	Documents - Use case specifications	06/Nov/23	11/Nov/23	
	Documents - Planning Meeting	30/Oct/23	30/Oct/23	
	Documents - Weekly Report	04/Nov/23 & 10/Nov/23	04/Nov/23 & 10/Nov/23	
	Documents - Review Meeting	11/Nov/23	11/Nov/23	

4.2.3.3. Sprint 3

SPRINT	TASK	START DATE	END DATE	ASSIGN	NOVEMBER WEEK5 / WEEK6 (12-26)
	Documents - Revise use case model	13/Nov/23	15/Nov/23	▼	
	Documents - Revise use case specifications	13/Nov/23	15/Nov/23	▼	
	Documents - Define software architecture	13/Nov/23	18/Nov/23	▼	
	Documents - Class diagram design	13/Nov/23	18/Nov/23	▼	
	Implementation - Basic UI component for Home page	13/Nov/23	22/Nov/23	▼	
	Implementation - Basic UI component for watching movie page	13/Nov/23	22/Nov/23	▼	
SPRINT 3	Implementation - Basic UI component for logging page	13/Nov/23	22/Nov/23	▼	
	Implementation - Basic BE implementation (having RESTApi for functional feature)	13/Nov/23	22/Nov/23	▼	
	DBMS - Data initialization	20/Nov/23	23/Nov/23	▼	
	DBMS - Connection to BE	23/Nov/23	26/Nov/23	▼	
	Documents - Planning Meeting	13/Nov/23	13/Nov/23	▼	
	Documents - Weekly Report	18/Nov/23 & 24/Nov/23	18/Nov/23 & 24/Nov/23	▼	
	Documents - Review Meeting	25/Nov/23	25/Nov/23	▼	

4.2.3.4. Sprint 4

SPRINT	TASK	START DATE	END DATE	ASSIGN	WEEK7 / WEEK8 (26-10)
	Revise Software Architecture Document	27/Nov/23	28/Nov/23	▼	
	UI - Revise Figma UI design	27/Nov/23	03/Dec/23	▼	
	Implementation - Home page UI implementation complete at basic level	27/Nov/23	03/Dec/23	▼	
	Implementation - Movie watching UI complete at basic level	27/Nov/23	03/Dec/23	▼	
	Implementation - Logging page UI complete at basic level	27/Nov/23	03/Dec/23	▼	
	Implementation - Watching movie functional	27/Nov/23	03/Dec/23	▼	
SPRINT 4	Implementation - Categorization feature compplete at basic level	27/Nov/23	03/Dec/23	▼	
	Implementation - Searching feature complete at basic level	27/Nov/23	03/Dec/23	▼	
	Implementation - Logging feature completion	27/Nov/23	03/Dec/23	▼	
	Documents - Planning Meeting	27/Nov/23	27/Nov/23	▼	
	Testing - Basic testing case must be prepared	04/Dec/23	08/Dec/23	▼	
	Documents - Weekly Report	02/Dec/23 & 08/Dec/23	02/Dec/23 & 08/Dec/23	▼	
	Documents - Review Meeting	09/Dec/23	09/Dec/23	▼	

4.2.3.5. Sprint 5

SPRINT	TASK	START DATE	END DATE	ASSIGN	DECEMBER WEEK8 / WEEK9 / WEEK10 (5-24)
	Build a PowerPoint presentation	11/Dec/23	17/Dec/23	▼	
	Write a report for the project	11/Dec/23	17/Dec/23	▼	
	Record a demo video	11/Dec/23	17/Dec/23	▼	
	Testing plan preparation	11/Dec/23	13/Dec/23	▼	
SPRINT 5	Testcase preparation	14/Dec/23	16/Dec/23	▼	
	Valid, bug fixing, accomplish Netflex	17/Dec/23	23/Dec/23	▼	
	Netflex release V1.0	22/Dec/23	23/Dec/23	▼	
	Documents - Planning Meeting	11/Dec/23	11/Dec/23	▼	
	Documents - Weekly Report	15/Dec/23 & 22/Dec/23	15/Dec/23 & 22/Dec/23	▼	
	Documents - Review Meeting	23/Dec/23	23/Dec/23	▼	

4.3 Project Monitoring and Control

4.3.1 Reporting

- Weekly Scrum Meetings
- Sprint Planning Meetings
- Sprint Review Meetings
- Progress tracking on Trello

4.3.2 Risk Management

Risk ID	Risk Description	Probability	Impact	Priority	Mitigation Strategy or Contingency Plan

4.3.3   Configuration Management

- Google Drive: for storing submissions, project-related documents, reports from weekly scrum meetings, sprint planning meetings and sprint review meetings
- Github: managing source code and project-related documentations